

CLAIMS:

5 1. A method of reducing voice frame network inbound traffic congestion,  
the method comprising:

determining whether a first defined threshold level of inbound voice and data  
traffic is reached and if so then

discriminating between inbound voice and data traffic within an input  
queue, and

freeing space within the input queue for use by inbound voice traffic  
until the first defined threshold level of inbound traffic no longer is reached.

10 2. The method of claim 1 wherein said freeing space is performed until a  
second defined threshold level of inbound traffic is reached, the second defined  
threshold level being less than the first defined threshold level.

15 3. The method of claim 1 wherein said discriminating includes first  
analyzing the size of each packet of inbound voice and data traffic within the input  
queue and comparing the same to predefined packet size criteria.

20 4. The method of claim 3 wherein said discriminating further includes  
second analyzing the rate at which packets of inbound voice and data traffic arrive in the  
input queue and comparing the same to predefined arrival rate criteria.

25 5. The method of claim 1 wherein said freeing space includes selectively  
discarding inbound data packets.

6. The method of claim 1 wherein said determining is performed upon an  
arrival of each packet of inbound voice and data traffic.

30 7. The method of claim 1, which further comprises:  
providing a user interface configured for setting the first defined threshold level.

8. The method of claim 1 wherein said freeing space is performed until a second defined threshold level of inbound traffic is reached, the second defined threshold level being less than the first defined threshold level, which further comprises prior to said determining:

5 providing a user interface that permits a user to define the first and second defined threshold levels.

9. Apparatus for use with an input queue representing inbound voice and data traffic on a voice frame network, the apparatus comprising:

10 decision logic determining whether a first defined threshold level of inbound voice and data traffic represented in the input queue is reached, and

15 queue management logic responsive to an affirmative determination from said decision logic, said queue management logic discriminating between inbound voice and data traffic within the input queue and freeing space within the input queue for use by inbound voice traffic until the first defined threshold level of inbound voice and data traffic no longer is reached.

20 10. The apparatus of claim 9 wherein said queue management logic frees space until a second defined threshold level of inbound traffic is reached, the second defined threshold level being less than the first defined threshold level.

25 11. The apparatus of claim 10, which further comprises:  
a user interface that permits a user to define the first and second defined threshold levels.

12. The apparatus of claim 9 wherein said decision logic includes an analyzer of the size of each packet of inbound voice and data traffic within the input queue and a comparator of the same to predefined packet size criteria.

30 13. The apparatus of claim 9 wherein said decision logic includes an analyzer of the rate at which packets of inbound voice and data traffic arrive in the input queue and a comparator of the same to predefined arrival rate criteria.

14. The apparatus of claim 9 wherein said queue management logic performs said freeing space by selectively discarding inbound data packets within the input queue.

5 15. The apparatus of claim 9 wherein said decision logic makes such determination upon an arrival of each packet of inbound voice and data traffic.

16. A computer-readable medium containing a program for reducing voice frame network inbound traffic congestion, the program comprising:

10 instructions for determining whether a first defined threshold level of inbound voice and data traffic is reached and if so then signaling such determination, and

instructions responsive to the signaling for discriminating between inbound voice and data traffic within an input queue and for discarding data thereby to free space within the input queue for use by inbound voice traffic until the first defined threshold level of inbound traffic no longer is reached.

17. The program of claim 16 wherein the discarding of data is performed until a second defined threshold level of inbound traffic is reached, the second defined threshold level being less than the first defined threshold level.

18. The program of claim 17, which further comprises:  
instructions defining a user interface for permitting a user to set the first and second defined threshold levels.

19. The program of claim 16 wherein the discriminating includes first analyzing the size of each packet of inbound voice and data traffic within the input queue and comparing the same to predefined packet size criteria.

20. The program of claim 19 wherein the discriminating includes second analyzing the rate at which packets of inbound voice and data traffic arrive in the input queue and comparing the same to predefined arrival rate criteria.

21. Apparatus for reducing voice frame network inbound traffic congestion, the apparatus comprising:

means for determining whether a first defined threshold level of inbound voice and data traffic is reached and if so then signaling such determination, and

5 means responsive to the signaling for discriminating between inbound voice and data traffic within an input queue and for discarding data thereby to free space within the input queue for use by inbound voice traffic until the first defined threshold level of inbound traffic no longer is reached, said discriminating means including means for first analyzing the size of each packet of inbound voice and data traffic within the input  
10 queue and means for first comparing the same to predefined packet size criteria, wherein the discarding of data is performed until a second defined threshold level of inbound traffic is reached, the second defined threshold level being less than the first defined threshold level.

15 22. The apparatus of claim 21 wherein said discriminating means further includes means for second analyzing the rate at which packets of inbound voice and data traffic arrive in the input queue and means for second comparing the same to predefined arrival rate criteria.

20 23. The apparatus of claim 22, which further comprises:  
user interface means for permitting a user to set the first and second defined threshold levels.